

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-003966**Date Inspected:** 12-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower & OBG**Summary of Items Observed:**

The Caltrans Quality Assurance (QA) Inspector Charlie Franco was present at the time requested to randomly observe welding and associated operations being performed for the Tower and Orthotropic Box Girders (OBG).

OBG Bay 3:

The QA Inspector randomly observed ZPMC welders Jia Anquan 201725, Wang Hong Bo ID Number 203206 and Sun Zuo Wen ID Number 048920, utilizing the Shielded Metal Arc Welding (SMAW) Process in the 2F (Horizontal Fillet) Position with ZPMC WPS Weld Procedure Specification WPS-2112-FCM, to tack weld T-Ribs to Bottom Plate BP0114-001 Weld Joint (WJ) Numbers 015/016, 008/009 and 013/014 respectively. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai, monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Xiao Di ID Number 203204, utilizing the SMAW Process in the 2F (Horizontal Fillet) Position with ZPMC WPS WPS-2112-FCM, to tack weld T-Ribs to Side Plate SP758-001 WJ's 043/046. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai, monitoring weld parameters. The weld parameters appeared to comply with contract requirements.

The QA Inspector randomly observed ZPMC welder Lei Ming ID Number 205774, utilizing the Flux Cored Arc Welding (FCAW) Process in the 2F (Horizontal Fillet) Position with WPS WPS-B-T-2132-3, to weld Stiffener X1021A to Edge Plate EP030-001 at WJ 007. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai monitoring weld parameters. The weld parameters appeared to comply

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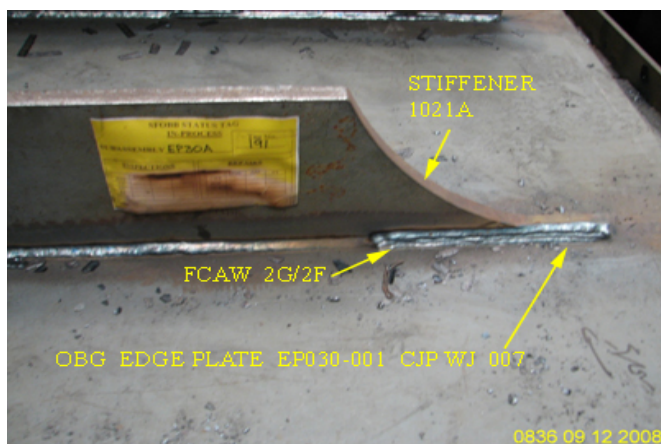
with contract requirements. The attached photograph provides additional detail.

The QA Inspector randomly observed ZPMC welders Wei Da Shui ID Number 051246, Xin Meng ID Number 053742, and Li Qian ID Number 048810, utilizing the FCAW Process in the 2F (Horizontal Fillet) Position on Gantry 2 with ZPMC WPS WPS-2132-3, to weld T-Ribs to Side Plate SP572-001. The QA Inspector randomly observed ZPMC QC under the supervision of ZPMC CWI Wu Ming Kai, monitoring weld parameters. The QA Inspector also randomly monitored weld parameters and recorded them as follows: 292/307 amps, 30./30.1 volts (WJ's 003/004) for Mr. Wei; 305/296 amps, 30.4/30.5 volts (WJ's 007/008) for Mr. Xin and 302/293 amps, 30.2/29.5 volts (WJ's 011/112) for Mr. Li with a travel speed of 446 millimeters (mm) per minute for all 3 welders. The weld parameters appeared to comply with contract requirements.

OBG Bay 4:

The QA Inspector was requested by ZPMC QC, to observe the final QC Magnetic Particle Testing (MT) of all welds attaching the stiffeners to Deck Plate DP723-001 WJ's 001 through 006. The QA Inspector randomly observed ZPMC Non-Destructive Testing (NDT) Technicians Wang Wei and Li Li Ming, utilizing the MT Method to examine 100% of the cover pass of the above listed welds. There appeared to be no indications and ZPMC QC accepted all welds.

The QA Inspector randomly performed a 10% MT final verification of the cover pass of the welds attaching the stiffeners to Deck Plate DP723-001 WJ's 001 through 006. There appeared to be no indications and the QA Inspector accepted the above listed welds. The QA Inspector signed off on the Green Tag Sheet after ZPMC Representative Xu Xian Ping and ABF Representative Hu Gin Hua signed. Green Tag Number 000776 issued by ABF Representative Kevin Dye, was attached to Deck Plate DP723A (DP723-001). See attached photograph and TL 6028 on this date for additional detail.



Summary of Conversations:

As noted in the above body of this report.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Ady Velasco 13816942685, who represents the Office of Structural Materials for

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your project.

Inspected By: Franco,Charlie

Quality Assurance Inspector

Reviewed By: Carreon,Albert

QA Reviewer